

**WHAT IS CLAIMED IS:**

1. In a rotary slicing machine having an impeller rotatably driven within a generally cylindrical impeller housing to carry food products by centrifugal force into sliding contact with an interior surface of said housing, said impeller housing having at least one radially open cutting slot cooperatively defined by a slicing gate at an upstream side thereof and a slicing knife at a downstream side thereof whereby the food products are carried by said impeller into cutting engagement with said slicing knife, the improvement comprising:

a tapered ramp at a downstream end of said slicing gate and defining a tapered edge forming said upstream side of said cutting slot, said tapered edge being angularly oriented relative to said slicing knife whereby the food products are cut into slices each having a tapered cross sectional thickness.

2. The improvement of claim 1 wherein said tapered ramp is mounted onto said downstream end of said slicing gate.

3. The improvement of claim 1 wherein said downstream end of said slicing gate is radially adjustable relative to said slicing knife for adjustably selecting slice thickness.

4. The improvement of claim 1 wherein said slicing gate comprising an arcuate segment hingedly connected to said impeller housing.

5. The improvement of claim 1 wherein said tapered ramp has a generally L-shaped cross sectional configuration including a gate leg having a tapered width and defining said tapered edge at said upstream side of the cutting slot, and a transition leg having a tapered free edge in substantially flush contact with an interior surface of said slicing gate, said transition leg

guiding the food products smoothly over said tapered leg into cutting engagement with said slicing knife.

6. The improvement of claim 5 further including means for removably mounting said tapered ramp onto said slicing gate.

7. The improvement of claim 1 wherein said rotary impeller further includes at least one paddle for carrying the food products into sliding contact with said interior surface of said impeller housing.

8. The improvement of claim 1 wherein said rotary impeller comprises an open-sided ring structure rotatably driven on a generally horizontal axis.

9. The improvement of claim 1 wherein the food products comprise potatoes.

10. A rotary slicing machine, comprising:

a generally cylindrical impeller housing at least one radially open cutting slot cooperatively defined by a slicing gate at an upstream side thereof and a slicing knife at a downstream side thereof;

an impeller rotatably driven within said impeller housing for carrying food products by centrifugal action into sliding contact with an interior surface of said housing whereby the food products are carried by said impeller into cutting engagement with said slicing knife; and

a tapered ramp at a downstream end of said slicing gate and defining a tapered edge forming said upstream side of said cutting slot, said tapered edge being angularly oriented relative to said slicing knife whereby the food products are cut into slices each having a tapered cross sectional thickness.

11. The rotary slicing machine of claim 10 wherein said tapered ramp is mounted onto said downstream end of said slicing gate.

12. The rotary slicing machine of claim 10 wherein said downstream end of said slicing gate is radially adjustable relative to said slicing knife for adjustably selecting slice thickness.

13. The rotary slicing machine of claim 10 wherein said slicing gate comprising an arcuate segment hingedly connected to said impeller housing.

14. The rotary slicing machine of claim 10 wherein said tapered ramp has a generally L-shaped cross sectional configuration including a gate leg having a tapered width and defining said tapered edge at said upstream side of the cutting slot, and a transition leg having a tapered free edge in substantially flush contact with an interior surface of said slicing gate, said transition leg guiding the food products smoothly over said tapered leg into cutting engagement with said slicing knife.

15. The rotary slicing machine of claim 14 further including means for removably mounting said tapered ramp onto said slicing gate.

16. The rotary slicing machine of claim 10 wherein said rotary impeller further includes at least one paddle for carrying the food products into sliding contact with said interior surface of said impeller housing.

17. The rotary slicing machine of claim 10 wherein said rotary impeller comprises an open-sided ring structure rotatably driven on a generally horizontal axis.

18. The rotary slicing machine of claim 10 wherein the food products comprise potatoes.